

Petition of Alun L. Palmer

Alun L. Palmer,
4300 Piney Church Road,
Waldorf, MD 20602
Telephone: +1 (301) 932-5933
Facsimile: +1 (775) 243-0825
E-mail: elektros@mdo.net

August 29, 2003

Secretary

Federal Communications Commission

Office of the Secretary

445 12th Street, SW

Room TW-204B

Washington, DC 20554

Dear Sir,

The following petition for proposed rule changes is hereby respectfully submitted:

Petition for Proposed Changes to Part 97 of FCC Rules to Reflect Changes to Section 25.5 of ITU Rules

1) Whereas _25.5 of the Radio Regulations of the International Telecommunications Union has been amended effective July 5, 2003 as follows:

1 25.5 §3 1) Administrations shall determine *whether or*
2 *not* a person seeking a licence to operate an amateur
3 station shall demonstrate the ability to send and
4 receive texts in Morse code signals.

5
6 (*Emphasis added*);

7
8 2) Whereas the FCC has previously determined¹ that Morse code testing in the Amateur service
9 was retained only to comply with the former version of _25.5:

10

11 While we do not disagree with the ARRL's belief that
12 the best way to learn telegraphy is to use it
13 on-the-air, and that actual use of telegraphy to
14 communicate is proof of the ability to send and
15 receive telegraphic texts, the Radio Regulations
16 provide that the telegraphy requirement may be waived
17 only for an operator of a station transmitting
18 exclusively on frequencies above 30 MHz. In this
19 regard, we also note, as the ARRL states, that *the*
20 *Radio Regulations remain an obligation of the*
21 *Commission that can not be waived.*

22

23 (*Emphasis added*); and

24 ¹REPORT AND ORDER Released: December 30, 1999, _25

25

26

27

28

1

2

3 3) Whereas the FCC has previously noted² that:

4

5

6 We are persuaded that because the amateur service is
7 fundamentally a technical service, the emphasis on
8 Morse code proficiency as a licensing requirement
9 does not comport with the basis and purpose of the
10 service.

11

12 ;

13

14 4) IT IS PROPOSED that Part 97 of the FCC rules be amended to remove all references to
15 Element 1 (the Morse code testing element); and

16

17 5) IT IS FURTHER PROPOSED that Part 97 of the FCC rules be amended to accord the operating
18 privileges of a 'Technician Plus' or 'Technician with HF' licensee to all Technician licensees, i.e. to allow all
19 Technician class operators access to all Novice frequencies.

20

21 The proposed rule changes are included in an appendix at the end of this petition. Please note that
22 a change to _97.505(a)(8) is included to correct a minor anomaly.

23

24 ²REPORT AND ORDER Released: December 30, 1999, _31

25

26

27

28

Petition of Alun L. Palmer

1

2

3

4

5

6

Respectfully Submitted,

7

8

9

10

11

12

13

Alun L. Palmer, BSc*, N3KIP

14

15

Amateur Extra Class

16

17

18

*Electronic and Electrical Engineering

20

21

22

23

24

25

26

27

28

1

APPENDIX - proposed Rule Changes

2

Additions are redlined and underlined, deletions are struck through.

4

§97.301 Authorized frequency bands.

The following transmitting frequency bands are available to
an amateur station located within 50 km of the Earth's
surface, within the specified ITU Region, and outside any
area where the amateur service is regulated by any authority
other than the FCC.

(a) For a station having a control operator who has been
granted a Technician, Technician Plus, General, Advanced, or
Amateur Extra Class operator license or who holds a CEPT
radio-amateur license or IARP of any class:

15

Wave- length band	ITU Region 1	ITU Region 2	ITU Region 3	Sharing requirements See §97.303, Paragraph:
VHF	MHz	MHz	MHz	
6-7	-	50-54	50-54	(a)
2-3	144-146	144-148	144-148	(a)
125 m -		219-220	-	(a), (e)
105	-	222-225	-	(a)
UHF	MHz	MHz	MHz	

27

28

Petition of Alun L. Palmer

70 cm	430-440	420-450	420-450	(a), (b), (f)
33 cm	-	902-928	-	(a), (b), (g)
23 cm	1240-1300	1240-1300	1240-1300	(h), (l)
13 cm	2300-2310	2300-2310	2300-2310	(a), (b), (j)
-dcs	2390-2450	2390-2450	2390-2450	(a), (b), (j)
SHF	GHz	GHz	GHz	
9 cm	-	3.3-3.5	3.3-3.5	(a), (b), (k), (l)
5 cm	5.650-5.850	5.650-5.925	5.650-5.850	(a), (b),
(m)				
3 cm	10.00-10.50	10.00-10.50	10.00-10.50	(b), (c),
(l), (n)				
1.2 cm	24.00-24.25	24.00-24.25	24.00-24.25	(a), (b), (h), (o)
EHF	GHz	GHz	GHz	
6 mm	47.0-47.2	47.0-47.2	47.0-47.2	
4 mm	75.5-81.0	75.5-81.0	75.5-81.0	(b), (c), (h), (r)
2.5 mm	119.98-120.02	119.98-120.02	119.98-120.02	(k),
(p)				
2 mm	142-149	142-149	142-149	(b), (c), (h), (k)
1 mm	241-250	241-250	241-250	(b), (c), (h), (q)
- 20	above 300	above 300	above 300	(k)

21

(b) For a station having a control operator who has been
 granted an Amateur Extra Class operator license or who holds
 a CEPT radio-amateur license Class 1 license or Class 1
 IASP:

Wave length	ITU	ITU	ITU	Sharing
-------------	-----	-----	-----	---------

27

28

Petition of Alun L. Palmer

band	Region 1	Region 2	Region 3	requirements
2				See §97.303,
3				Paragraph:
MF4	kHz	kHz	kHz	
160 m	1810-1850	1800-2000	1800-2000	(a), (b), (c)
HF6	MHz	MHz	MHz	
80 m	3.50-3.75	3.50-3.75	3.50-3.75	(a)
75 m	3.75-3.80	3.75-4.00	3.75-3.90	(a)
40 m	7.0-7.1	7.0-7.3	7.0-7.1	(a)
30 m	10.10-10.15	10.10-10.15	10.10-10.15	(d)
20 m	14.00-14.35	14.00-14.35	14.00-14.35	
17 m	18.068-18.168	18.068-18.168	18.068-18.168	
15 m	21.00-21.45	21.00-21.45	21.00-21.45	
12 m	24.89-24.99	24.89-24.99	24.89-24.99	
10 m	28.0-29.7	28.0-29.7	28.0-29.7	
16				

(c) For a station having a control operator who has been
 granted an operator license of Advanced Class:

Wave length	ITU	ITU	ITU	Sharing
band	Region 1	Region 2	Region 3	requirements
21				See §97.303,
22				Paragraph:
MF3	kHz	kHz	kHz	
160 m	1810-1850	1800-2000	1800-2000	(a), (b), (c)
HF5	MHz	MHz	MHz	
80 m	3.525-3.750	3.525-3.750	3.525-3.750	(a)

27

28

Petition of Alun L. Palmer

75 m	3.775-3.800	3.775-4.000	3.775-3.900	(a)
40 m	7.025-7.100	7.025-7.300	7.025-7.100	(a)
30 m	10.10-10.15	10.10-10.15	10.10-10.15	(d)
20 m	14.025-14.150	14.025-14.150	14.025-14.150	
17 m	18.068-18.168	18.068-18.168	18.068-18.168	
15 m	21.025-21.200	21.025-21.200	21.025-21.200	
12 m	24.89-24.99	24.89-24.99	24.89-24.99	
10 m	28.0-29.7	28.0-29.7	28.0-29.7	

11

(d) For a station having a control operator who has been granted an operator license of General Class:

Wavelength	ITU Region 1	ITU Region 2	ITU Region 3	Sharing requirements
160 m				See §97.303, Paragraph:
160 m	1810-1850	1800-2000	1800-2000	(a), (b), (c)
80 m	3.525-3.750	3.525-3.750	3.525-3.750	(a)
75 m	-	3.85-4.00	3.85-3.90	(a)
40 m	7.025-7.100	7.025-7.150	7.025-7.100	(a)
30 m	10.10-10.15	10.10-10.15	10.10-10.15	(d)
20 m	14.025-14.150	14.025-14.150	14.025-14.150	

27

28

Petition of Alun L. Palmer

172m	14.225-14.350	14.225-14.350	14.225-14.350
153m	18.068-18.168	18.068-18.168	18.068-18.168
125m	21.025-21.200	21.025-21.200	21.025-21.200
106m	21.30-21.45	21.30-21.45	21.30-21.45
7	24.89-24.99	24.89-24.99	24.89-24.99
	28.0-29.7	28.0-29.7	28.0-29.7

(e) For a station having a control operator who has been granted an operator license of Novice Class or Technician Class and who has received credit for proficiency in telegraphy in accordance with the international requirements.

Wave length band	ITU Region 1	ITU Region 2	ITU Region 3	Sharing requirements
15				See §97.303,
16				Paragraph:
HF7	MHz	MHz	MHz	
80m	3.675-3.725	3.675-3.725	3.675-3.725 (a)	
40m	7.050-7.075	7.10-7.15	7.050-7.075 (a)	
30m	21.10-21.20	21.10-21.20	21.10-21.20	
10m	28.10-28.50	28.10-28.50	28.10-28.50	
22				
25	MHz	MHz	MHz	
125 m -		222-225	-	(a)
25				
27	MHz	MHz	MHz	

23 fm 1270-1295 1270-1295 1270-1295 (h) (l)

2

§97.307 Emission standards.

(a) No amateur station transmission shall occupy more bandwidth than necessary for the information rate and emission type being transmitted, in accordance with good amateur practice.

(b) Emissions resulting from modulation must be confined to the band or segment available to the control operator.

Emissions outside the necessary bandwidth must not cause splatter or keyclick interference to operations on adjacent frequencies.

(c) All spurious emissions from a station transmitter must be reduced to the greatest extent practicable. If any spurious emission, including chassis or power line radiation, causes harmful interference to the reception of another radio station, the licensee of the interfering amateur station is required to take steps to eliminate the interference, in accordance with good engineering practice.

(d) The mean power of any spurious emission from a station transmitter or external RF power amplifier transmitting on a frequency below 30 MHz must not exceed 50 mW and must be at least 40 dB below the mean power of the fundamental emission. For a transmitter of mean power less than 5 W, the attenuation must be at least 30 dB. A transmitter built before April 15, 1977, or first marketed before January 1,

27

28

1978, is exempt from this requirement.

(e) The mean power of any spurious emission from a station transmitter or external RF power amplifier transmitting on a frequency between 30-225 MHz must be at least 60 dB below the mean power of the fundamental. For a transmitter having a mean power of 25 W or less, the mean power of any spurious emission supplied to the antenna transmission line must not exceed 25 μ W and must be at least 40 dB below the mean power of the fundamental emission, but need not be reduced below the power of 10 μ W. A transmitter built before April 15, 1977, or first marketed before January 1, 1978, is exempt from this requirement.

(f) The following standards and limitations apply to transmissions on the frequencies specified in §97.305(c) of this Part.

(1) No angle-modulated emission may have a modulation index greater than 1 at the highest modulation frequency.

(2) No non-phone emission shall exceed the bandwidth of a communications quality phone emission of the same modulation type. The total bandwidth of an independent sideband emission (having B as the first symbol), or a multiplexed image and phone emission, shall not exceed that of a communications quality A3E emission.

(3) Only a RTTY or data emission using a specified digital code listed in §97.309(a) of this Part may be transmitted.

The symbol rate must not exceed 300 bauds, or for frequency-

shift keying, the frequency shift between mark and space must not exceed 1 kHz.

(4) Only a RTTY or data emission using a specified digital code listed in §97.309(a) of this Part may be transmitted. The symbol rate must not exceed 1200 bauds. For frequency-shift keying, the frequency shift between mark and space must not exceed 1 kHz.

(5) A RTTY, data or multiplexed emission using a specified digital code listed in §97.309(a) of this Part may be transmitted. The symbol rate must not exceed 19.6 kilobauds. A RTTY, data or multiplexed emission using an unspecified digital code under the limitations listed in §97.309(b) of this Part also may be transmitted. The authorized bandwidth is 20 kHz.

(6) A RTTY, data or multiplexed emission using a specified digital code listed in §97.309(a) of this Part may be transmitted. The symbol rate must not exceed 56 kilobauds. A RTTY, data or multiplexed emission using an unspecified digital code under the limitations listed in §97.309(b) of this Part also may be transmitted. The authorized bandwidth is 100 kHz.

(7) A RTTY, data or multiplexed emission using a specified digital code listed in §97.309(a) of this Part or an unspecified digital code under the limitations listed in §97.309(b) of this Part may be transmitted.

(8) A RTTY or data emission having designators with A, B, C,

D, E, F, G, H, J or R as the first symbol; 1, 2, 7 or 9 as the second symbol; and D or W as the third symbol is also authorized.

(9) A station having a control operator holding a Novice or Technician Class operator license may only transmit a CW emission using the international Morse code.

(10) A station having a control operator holding a Novice Class operator license or a Technician Class operator license and who has received credit for proficiency in telegraphy in accordance with the international requirements may only transmit a CW emission using the international Morse code or phone emissions J3E and R3E.

(11) Phone and image emissions may be transmitted only by stations located in ITU Regions 1 and 3, and by stations located within ITU Region 2 that are west of 130° West longitude or south of 20° North latitude.

(12) Emission F8E may be transmitted.

(13) A data emission using an unspecified digital code under the limitations listed in § 97.309(b) of this Part also may be transmitted. The authorized bandwidth is 100 kHz.

§ 97.309 RTTY and data emission codes.

(a) Where authorized by § 97.305(c) and 97.307(f) of this Part, an amateur station may transmit a RTTY or data emission using the following specified digital codes:

(1) The 5-unit, start-stop, International Telegraph Alphabet No. 2, code defined in International Telegraph and Telephone

Consultative Committee Recommendation F.1, Division C
(commonly known as Baudot).

(2) The 7-unit code, specified in International Radio
Consultative Committee Recommendation CCIR 476-2 (1978),
476-3 (1982), 476-4 (1986) or 625 (1986) (commonly known as
AMTOR).

(3) The 7-unit code defined in American National Standards
Institute X3.4-1977 or International Alphabet No. 5 defined
in International Telegraph and Telephone Consultative
Committee Recommendation T.50 or in International
Organization for Standardization, International Standard ISO
646 (1983), and extensions as provided for in CCITT
Recommendation T.61 (Malaga-Torremolinos, 1984) (commonly
known as ASCII).

(4) An amateur station transmitting a RTTY or data emission
using a digital code specified in this paragraph may use any
technique whose technical characteristics have been
documented publicly, such as CLOVER, G-TOR, or PacTOR, for
the purpose of facilitating communications.

(b) Where authorized by §§97.305(c) and 97.307(f) of this
Part, a station may transmit a RTTY or data emission using
an unspecified digital code, except to a station in a
country with which the United States does not have an
agreement permitting the code to be used. RTTY and data
emissions using unspecified digital codes must not be
transmitted for the purpose of obscuring the meaning of any

communication. When deemed necessary by an EIC to assure compliance with the FCC Rules, a station must:

- (1) Cease the transmission using the unspecified digital code;
- (2) Restrict transmissions of any digital code to the extent instructed;
- (3) Maintain a record, convertible to the original information, of all digital communications transmitted.

§97.313 Transmitter power standards.

- (a) An amateur station must use the minimum transmitter power necessary to carry out the desired communications.
- (b) No station may transmit with a transmitter power exceeding 1.5 kW PEP.
- (c) No station may transmit with a transmitter power exceeding 200 W PEP on:
 - (1) The 3.675-3.725 MHz, 7.10-7.15 MHz, 10.10-10.15 MHz and 21.1-21.2 MHz segments;
 - (2) The 28.1-28.5 MHz segment when the control operator is a Novice Class operator or a Technician Class operator who has received credit for proficiency in telegraphy in accordance with the international requirements; or
 - (3) The 7.050-7.075 MHz segment when the station is within ITU Regions 1 or 3.
- (d) No station may transmit with a transmitter power exceeding 25 W PEP on the VHF 1.25 m band when the control operator is a Novice operator.

(e) No station may transmit with a transmitter power exceeding 5 W PEP on the UHF 23 cm band when the control operator is a Novice operator.

(f) No station may transmit with a transmitter power exceeding 50 W PEP on the UHF 70 cm band from an area specified in footnote US7 to § 2.106 of Part 2, unless expressly authorized by the FCC after mutual agreement, on a case-by-case basis, between the District Director of the applicable field facility and the military area frequency coordinator at the applicable military base. An Earth station or telecommand station, however, may transmit on the 435-438 MHz segment with a maximum of 611 W effective radiated power (1 kW equivalent isotropically radiated power) without the authorization otherwise required. The transmitting antenna elevation angle between the lower half-power (-3 dB relative to the peak or antenna bore sight) point and the horizon must always be greater than 10°.

(g) No station may transmit with a transmitter power exceeding 50 W PEP on the 33 cm band from within 241 km of the boundaries of the White Sands Missile Range. Its boundaries are those portions of Texas and New Mexico bounded on the south by latitude 31° 41' North, on the east by longitude 104° 11' West, on the north by latitude 34° 30' North, and on the west by longitude 107° 30' West.

(h) No station may transmit with a transmitter power exceeding 50 W PEP on the 219-220 MHz segment of the 1.25 m

band.

§97.501 Qualifying for an amateur operator license.

Each applicant must pass an examination for a new amateur operator license grant and for each change in operator class. Each applicant for the class of operator license grant specified below must pass, or otherwise receive examination credit for, the following examination elements:

- (a) Amateur Extra Class operator: Elements 1, 2, 3, and 4;
- (b) General Class operator: Elements 1, 2, and 3;
- (c) Technician Class operator: Element 2.

§97.503 Element standards.

~~(a) A telegraphy examination must be sufficient to prove that the examinee has the ability to send correctly by hand and to receive correctly by ear texts in the international Morse code at not less than the prescribed speed, using all the letters of the alphabet, numerals 0-9, period, comma, question mark, slant mark and prosigns AR, BT and SK.~~

~~Element 1: 5 words per minute.~~

~~(b) A written examination must be such as to prove that the examinee possesses the operational and technical qualifications required to perform properly the duties of an amateur service licensee. Each written examination must be comprised of a question set as follows:~~

~~(1) Element 2: 35 questions concerning the privileges of a Technician Class operator license. The minimum passing score is 26 questions answered correctly.~~

27

28

(2) ~~Element 3:~~ 35 questions concerning the privileges of a General Class operator license. The minimum passing score is 26 questions answered correctly.

(3) ~~Element 4:~~ 50 questions concerning the privileges of an Amateur Extra Class operator license. The minimum passing score is 37 questions answered correctly.

§97.505 Element credit.

(a) ~~8~~ The administering VEs must give credit as specified below to an examinee holding any of the following license grants or license documents:

(1) ~~1~~ An unexpired (or expired but within the grace period for renewal) FCC-granted Advanced Class operator license grant: Elements 1, 2, and 3.

(2) ~~4~~ An unexpired (or expired but within the grace period for renewal) FCC-granted General Class operator license grant: Elements 1, 2, and 3.

(3) ~~7~~ An unexpired (or expired but within the grace period for renewal) FCC-granted Technician Plus Class operator (including a Technician Class operator license granted before February 14, 1991) license grant: Elements 1 and 2.

(4) ~~1~~ An unexpired (or expired but within the grace period for renewal) FCC-granted Technician Class operator license grant: Element 2.

(5) ~~4~~ An unexpired (or expired) FCC-granted Novice Class operator license grant: Element 1.

(6) ~~6~~ CSCE: Each element the CSCE indicates the examinee

passed within the previous 365 days.

~~(7) An unexpired (or expired less than 5 years) FCC-issued commercial radiotelegraph operator license or permit:~~

~~Element 1.~~

~~(6) An expired FCC-issued Technician Class operator license document granted before March 21, 1987: Elements [2](#) and [3](#).~~

~~(9) An expired or unexpired FCC-issued Technician Class operator license document granted before February 14, 1991:~~

~~Element 1.~~

~~(b) No examination credit, except as herein provided, shall be allowed on the basis of holding or having held any other license grant or document.~~

~~§97.507 Preparing an examination.~~

~~(a) Each telegraphy message and each written question set administered to an examinee must be prepared by a VE holding an Amateur Extra Class operator license. A telegraphy message or written question set may also be prepared for the following elements by a VE holding an operator license of the class indicated:~~

~~(1) Element 3: Advanced Class operator.~~

~~(2) Elements 1 and 2: Advanced, General, or Technician (including Technician Plus) Class operators.~~

~~(b) Each question set administered to an examinee must utilize questions taken from the applicable question pool.~~

~~(c) Each telegraphy message and each written question set administered to an examinee for an amateur operator license~~

must be prepared, or obtained from a supplier, by the administering VEs according to instructions from the coordinating VEC.

~~(d) A telegraphy examination must consist of a message sent in the international Morse code at no less than the prescribed speed for a minimum of 5 minutes. The message must contain each required telegraphy character at least once. No message known to the examinee may be administered in a telegraphy examination. Each 5 letters of the alphabet must be counted as 1 word. Each numeral, punctuation mark and prosign must be counted as 2 letters of the alphabet.~~

~~§ 97.509~~ Administering VE requirements.

~~(a) Each examination for an amateur operator license must be administered by a team of at least 3 VEs at an examination session coordinated by a VEC. Before the session, the administering VEs or the VE session manager must ensure that a public announcement is made giving the location and time of the session. The number of examinees at the session may be limited.~~

~~(b) Each administering VE must:~~

- ~~(1) Be accredited by the coordinating VEC;~~
- ~~(2) Be at least 18 years of age;~~
- ~~(3) Be a person who holds an amateur operator license of the class specified below:~~

~~(i) Amateur Extra, Advanced or General Class in order to administer a Technician Class operator license examination;~~

- (ii) Amateur Extra or Advanced Class in order to administer a General Class operator license examination;
- (iii) Amateur Extra Class in order to administer an Amateur Extra Class operator license examination.
- (4) Not be a person whose grant of an amateur station license or amateur operator license has ever been revoked or suspended.
- (c) Each administering VE must be present and observing the examinee throughout the entire examination. The administering VEs are responsible for the proper conduct and necessary supervision of each examination. The administering VEs must immediately terminate the examination upon failure of the examinee to comply with their instructions.
- (d) No VE may administer an examination to his or her spouse, children, grandchildren, stepchildren, parents, grandparents, stepparents, brothers, sisters, stepbrothers, stepsisters, aunts, uncles, nieces, nephews, and in-laws.
- (e) No VE may administer or certify any examination by fraudulent means or for monetary or other consideration including reimbursement in any amount in excess of that permitted. Violation of this provision may result in the revocation of the grant of the VE's amateur station license and the suspension of the grant of the VE's amateur operator license.
- (f) No examination that has been compromised shall be administered to any examinee. Neither the same telegraphy

message nor the The same question set may not be re-administered to the same examinee.

(g) ~~Passing a telegraphy receiving examination is adequate proof of an examinee's ability to both send and receive telegraphy. The administering VEs, however, may also include a sending segment in a telegraphy examination.~~

(h) ~~Upon completion of each examination element, the administering VEs must immediately grade the examinee's answers. The administering VEs are responsible for determining the correctness of the examinee's answers.~~

(i) ~~When the examinee is credited for all examination elements required for the operator license sought, 3 VEs must certify that the examinee is qualified for the license grant and that the VEs have complied with these administering VE requirements. The certifying VEs are jointly and individually accountable for the proper administration of each examination element reported. The certifying VEs may delegate to other qualified VEs their authority, but not their accountability, to administer individual elements of an examination.~~

(j) ~~When the examinee does not score a passing grade on an examination element, the administering VEs must return the application document to the examinee and inform the examinee of the grade.~~

(k) ~~The administering VEs must accommodate an examinee whose physical disabilities require a special examination~~

procedure. The administering VEs may require a physician's certification indicating the nature of the disability before determining which, if any, special procedures must be used.

(k) The administering VEs must issue a CSCE to an examinee who scores a passing grade on an examination element.

(l) Within 10 days of the administration of a successful examination for an amateur operator license, the administering VEs must submit the application document to the coordinating VEC.

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28